

Application No. 10/534,747
Amendment dated October 26, 2006
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Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1 - 12 (canceled)

13. (new) A molding system including a plurality of mold blocks which move along a molding path to form double wall plastic pipe having an outer wall with corrugations which set outside diameter of the pipe and an inner wall around a pipe bore through the pipe, each mold block having profiled face which determines shape of the pipe, said profiled face including a trough, a crest mounting portion and a crest forming part characterized in that said trough and said crest mounting portion are formed in and integral with said mold block and said crest mounting portion is positioned inwardly of the trough with said crest mounting portion detachably and selectively receiving said crest forming parts which are of radial different dimensions for reconfiguring said profiled face between a first and a second face profile to change both depth of the corrugations and diameter of the bore through the pipe without varying the external diameter of the pipe.

14. (new) A molding system as claimed in claim 13 characterized by a vacuum channel located within the mold block beneath the trough and the crest mounting portion of the profiled face of the mold block.

15. (new) A molding system as claimed in claim 14 wherein said vacuum claimed is connected to said trough.

16. (new) A molding system as claimed in claim 15 wherein said crest mounting portion (12) includes a projecting shoulder

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received in a corresponding recess of said crest forming parts to locate said crest forming parts in said mold block along a length of said crest forming parts.

17. (new) A molding system as claimed in claim 15 wherein each mold block includes opposed ends extending in a length of the mold block for abutting with an opposed mold block and said opposed ends are recessed and include a fastening arrangement securing each crest forming part to said mold block.

18. (new) A molding system as claimed in claim 13 characterized by a cooling channel located within the mold block beneath the trough and the crest mounting portion of the profiled face of the mold block.

19. (new) A molding system as claimed in claim 13 characterized by a recess in the trough and the crest mounting portion of the profiled face of the mold block and a clip which hooks into the recess and which further hooks into a recess of the selected crest forming part, the clip further securing into of the trough and the crest forming portion of the profiled face at the crest mounting portion by means of a mechanical securing member.

20. (new) A molding system as claimed in claim 13 characterized by a first cooling plug which is used in the system when the crest forming part is fitted to the crest mounting portion and a second cooling plug which is used in the system in replacement of the first cooling plug when the crest forming part is fitted to the mounting portion, the crest forming part being longer than then crest forming part and the cooling plug being of smaller diameter than the cooling plug.

21. (new) A molding system as claimed in claim 13, said profiled faces of said mold blocks when configured with the first face

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profile forming the pipe with a first corrugation depth and a first bore diameter and when configured with the second face profile forming the pipe with a second corrugation depth greater than the first corrugation depth and a second bore diameter less than the first bore diameter.

22.(new) A molding system as claimed in claim 20 wherein said inner wall of said pipe has a wall thickness that remains essentially constant when reconfiguring the profiled faces of the mold blocks between the first and second face profiles.

23.(new) A molding apparatus as claimed in claim 20 wherein said molding path includes cooling and shape holding means for the inner wall of the pipe, said means being diameter variable according to which face profile is provided on the faces of the mold blocks.

24.(new) A molding system as claimed in claim 23 wherein said cooling and shape molding means comprises first and second cooling plugs which are interchangeably fittable in said molding path, said first cooling plug having a diameter which is greater than that of said second cooling plug, the first cooling plug being used when the mold blocks have the first face profile and the second cooling plug being used when the mold blocks have the second face profile.

25.(new) A pipe molding apparatus for making a continuous length of plastic pipe, said apparatus comprising first and second mold block sections each having profiled faces formed by crests and troughs on the profiled faces of the mold block sections, a first set of face attachments and a second set of face attachments, the first and second sets of face attachments being interchangeably and releasably insertable on to the profiled faces of the mold block sections, and first and second cooling plugs of diameters

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differing from one another, the first and second mold block sections circulating to and away from a molding tunnel of the apparatus which contains one of said cooling plugs, the mold tunnel receiving a continuous stream of molten plastic to form the pipe over the one of the cooling plugs with an internal bore and a wall having an undulating exterior surface around said bore, the undulating surface defining external diameter of the pipe, the first mold block sections closing with the second mold block sections to form a moving line of closed mold blocks while circulating through the mold tunnel and the first and second mold block sections parting from one another while circulating away from and back to the mold tunnel, said apparatus when in a first set up condition producing the pipe with a first bore diameter when the first set of face attachments are fitted to the profiled faces of the first and second mold block sections and when the first cooling plug is placed in the mold tunnel and the apparatus when in a second set up condition producing the pipe with a second bore diameter different from the first bore diameter while maintaining essentially constant wall thickness of the pipe when the second set of face attachments are fitted to the profiled faces of the first and second mold block sections and secured at the ends of the mold block sections and when the second cooling plug is placed in the mold tunnel, the external diameter of the pipe remaining constant in both the first and the second set up conditions of the apparatus; and wherein each mold block includes integral trough portions that define the external diameter of the pipe.

26.(new) A pipe molding apparatus as claimed in claim 25 wherein said first set and second set of face attachments interchangeably and releasably secure as crest forming members of the profiled faces of the first and second mold block sections, the face attachments of the first set of face attachments being of a first cross sectional dimension which is less than a cross sectional

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dimension of the face attachments of the second set of face attachments and the first cooling plug having a diameter greater than that of the second cooling plug and the second bore diameter of the pipe being less than the first bore diameter of the pipe.

27. (new) A pipe molding apparatus as claimed in claim 25 wherein said first and second set of attachments are releasably secured in recesses provided in end faces of the mold blocks.

28. (new) A pipe molding system as claimed in claim 25 wherein said integral trough portions of each mold block include vacuum slots for drawing molten plastic into said trough portions.